## IN THE CLAIMS

Kindly amend the claims as follows:

- 1. (canceled)
- 2. (canceled)
- 3. (canceled)
- 4. (canceled)
- 5. (canceled)
- 6. (canceled)
- 7. (canceled)
- 8. (canceled)
- 9. (currently amended) An optical glass having optical constants of a refractive index (nd) within a range from 1.49 to 1.6, comprising, in mass %,
- P<sub>2</sub>O<sub>5</sub> 4 39% Al<sub>2</sub>O<sub>3</sub> 0 - 9% MgO 0 - 5%
- CaO 0 6% SrO 0 - 9%
- BaO 0 10%
- $Y_2O_3+La_2O_3+Gd_2O_3+Yb_2O_3$  in the total amount of 0 20%

Where

 $Y_2O_3$  0 - 10%  $La_2O_3$  0 - 10%

and

- $Yb_2O_3$  0 10%
- $TiO_2$  0 -0.1%
- $SnO_2$  0 1%  $As_2O_3$  0 - 0.5%
- $Sb_2O_3$  0 0.5%
- AlF<sub>3</sub> 0 29%
- $MgF_2$  0 8%
- $CaF_2$  0 27%  $SrF_2$  0 27%
- BaF<sub>2</sub> 10 47%
- YF<sub>3</sub> 0 10%
- LaF<sub>3</sub> 0 10%
- $GdF_3$  0 10%

LiF 0 - 3%

NaF 0 - [[1]] <u>0.1</u>%

KF 0-[[0.1]]<u>1</u>%

the total amount of F in one or more of the fluorides being [[10]] <u>22</u> - 45% and the total amount of one or more of MgF<sub>2</sub>, CaF<sub>2</sub>, SrF<sub>2</sub> and BaF<sub>2</sub> being 30 - 70%.

10. (previously presented) An optical glass as defined in claim 9 wherein an amount of change in refractive index (Δn: difference in refractive index between a state before radiation and a state after radiation) caused by radiation of laser beam at wavelength of 351nm having average output power of 0.43W, pulse repetition rate of 5kHz and pulse width of 400ns for one hour is 5 ppm or below.

11.(currently amended) An optical glass having optical constants of an Abbe number (vd) within a range from 69 to 82, comprising, in mass %,

P<sub>2</sub>O<sub>5</sub> 4 - 39% Al<sub>2</sub>O<sub>3</sub> 0 - 9% MgO 0 - 5% CaO 0 - 6% SrO 0 - 9% BaO 0 - 10%

 $Y_2O_3+La_2O_3+Gd_2O_3+Yb_2O_3$  in the total amount of 0 - 20%

Where

GdF<sub>3</sub>

 $Y_2O_3$ 0 - 10% La<sub>2</sub>O<sub>3</sub> 0 - 10% and Yb<sub>2</sub>O<sub>3</sub> 0 - 10% TiO<sub>2</sub> 0 -0.1% 0 - 1%  $SnO_2$  $As_2O_3$ 0 - 0.5% Sb<sub>2</sub>O<sub>3</sub> 0 - 0.5% AlF<sub>3</sub> 0 - 29%  $MgF_2$ 0 - 8% CaF<sub>2</sub> 0 - 27% 0 - 27%  $SrF_2$ 10 - 47% BaF<sub>2</sub> 0 - 10%  $YF_3$ 0 - 10% LaF<sub>3</sub>

0 - 10%

```
LiF 0 - 3%
NaF 0-0.1%
KF 0 - 1%
```

the total amount of F in one or more of the fluorides being 10—45 22-45% and the total amount of one or more of MgF<sub>2</sub>, CaF<sub>2</sub>, SrF<sub>2</sub> and BaF<sub>2</sub> being 30 - 70%.

12.(previously presented) An optical glass as defined in claim 11 wherein an amount of change in refractive index (Δn: difference in refractive index between a state before radiation and a state after radiation) caused by radiation of laser beam at wavelength of 351nm having average output power of 0.43W, pulse repetition rate of 5kHz and pulse width of 400ns for one hour is 5 ppm or below..

13. (previously presented) An optical glass having optical constants of an Abbe number (vd) within a range from 95.1 to 97.1, comprising, in mass %,

```
P_2O_5
                    4 - 39%
                    0 - 9%
Al_2O_3
                        0 - 5%
MgO
                        0 - 6%
CaO
SrO
                        0 - 9%
                        0 - 10%
BaO
Y_2O_3+La_2O_3+Gd_2O_3+Yb_2O_3 in the total amount of 0 - 20%
Where
                    0 - 10%
Y_2O_3
                    0 - 10%
La<sub>2</sub>O<sub>3</sub>
and
                    0 - 10%
Yb<sub>2</sub>O<sub>3</sub>
                    0 -0.1%
TiO<sub>2</sub>
                    0 - 1%
SnO_2
                    0 - 0.5%
As_2O_3
                    0 - 0.5%
Sb<sub>2</sub>O<sub>3</sub>
                    0 - 28.3%
AlF<sub>3</sub>
MgF_2
                    0 - 8%
                    0 - 27%
CaF<sub>2</sub>
                    0 - 27%
SrF_2
                   10 - 47%
BaF<sub>2</sub>
YF_3
                        0 - 10%
                    0 - 10%
LaF<sub>3</sub>
```

0 - 10%

GdF<sub>3</sub>

LiF	0 - 3%
NaF	0 - 1%
KF	0 - 1%

the total amount of F in one or more of the fluorides being 10 - 45% and the total amount of one or more of MgF<sub>2</sub>, CaF<sub>2</sub>, SrF<sub>2</sub> and BaF<sub>2</sub> being 30 - 70%.

14. (previously presented) An optical glass as defined in claim 13 wherein an amount of change in refractive index (Δn: difference in refractive index between a state before radiation and a state after radiation) caused by radiation of laser beam at wavelength of 351nm having average output power of 0.43W, pulse repetition rate of 5kHz and pulse width of 400ns for one hour is 5 ppm or below.

15. (new) A method of making an optical glass for lenses of an optical system of an i'line stepper comprising employing an optical glass comprising, in mass %,

```
4 - 39%
P_2O_5
Al_2O_3
                   0 - 9%
                      0 - 5%
MgO
                      0 - 6%
CaO
                      0 - 9%
SrO
BaO
                      0 - 10%
Y_2O_3+La_2O_3+Gd_2O_3+Yb_2O_3 in the total amount of 0 - 20%
Where
Y_2O_3
                   0 - 10%
La<sub>2</sub>O<sub>3</sub>
                   0 - 10%
                  0-20%
Gd<sub>2</sub>O<sub>3</sub>
and
Yb_2O_3
                   0 - 10%
TiO<sub>2</sub>
                   0 -0.1%
SnO_2
                   0 - 1%
As_2O_3
                   0 - 0.5%
Sb_2O_3
                   0 - 0.5%
AlF<sub>3</sub>
                   0 - 29%
                   0 - 8%
MgF_2
                   0 - 27%
CaF<sub>2</sub>
SrF_2
                   0 - 27%
BaF<sub>2</sub>
                  10 - 47%
                   0 - 10%
YF_3
LaF<sub>3</sub>
                   0 - 10%
                   0 - 10%
GdF<sub>3</sub>
                      0 - 3%
LiF
NaF
                      0 - 1%
KF
                      0-1%
```

the total amount of F in one or more of the fluorides being 10 - 45% and the total amount of one or more of MgF<sub>2</sub>, CaF<sub>2</sub>, SrF<sub>2</sub> and BaF<sub>2</sub> being 30 - 70%.